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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,192	04/02/2004	Swamy Mandavilli	10003778-3	2164

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EXAMINER

NGUYEN, PHU K

ART UNIT PAPER NUMBER

2673

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,192

Applicant(s)

MANDAVILLI ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/8/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 5-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 1-2, and 5-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalal et al. (6,363,404) in view of Powers et al. (6,362,817).

As per claim 1, Dalal teaches the claimed "collaborative graphical viewing system" comprising:

"a markup module" (Dalal, column 7, lines 43-54). It is noted that although Dalal mentions about a viewpoint for displaying a perspective object, Dalal does not explicitly teach the "camera position" representing the position of camera taking the image of object as claimed. However, Powers's teaching of the 3D image of object's perspective view teaches the camera position where the images are taken as claimed (Powers, a virtual camera is attached to user's representative; column 10, lines 35-65). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D perspective images correspondence with a camera position can be used for showing the object in Dalal's system for a realistic representation of a perspective projection.

RESPONSE TO APPLICANT's ARGUMENT:

Applicant's arguments filed December 8, 2006 have been fully considered but they are not deemed to be persuasive.

Applicant argues that there is a lack of motivation to combine the references, which is not correct. Although Dalai does not explicitly teach "a camera's position," its perspective projection is related to a perspective projective point which is indeed a view point of the camera's position. Powers teaches the same art of perspective projection

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of the viewing 3D space, which is similar and therefore combinable to Dalai reference.

Powers further explains the relations between the perspective projection and a view point (or a camera's position) in a perspective space (Powers, column 10, lines 35-38).

The Powers reference is used to clarify or better explain a relationship between a perspective point in projection of Dalai reference and a viewpoint or camera position in the claimed invention. Both of the references are in the same art and refer to the same perspective display technique, therefore, the motivation to combine two references is properly stated as visual enhancement for a realistic representation of a perspective projection.

Applicant argues that the Powers reference does not teach "a camera's position" which is not correct. Powers clearly specifies that the view point is attached to the user's present or the cartoonist cat in 3D world (column 10, lines 35-38); in other words, the camera's position is defined based on the user's position. Specifically, Powers teaches the camera's position is placed at the center of user's representative block (Powers, the camera position (x,y,z) is defined at the center of character block; column 19, lines 30-35). Therefore, Powers clearly teach "a camera's position" as claimed.

Applicant's arguments for claims 1, 7, 13, 19, 25 are based on the same argument related to motivation to combine references and the limitation of "camera's position" which are deemed to be moot in view of Examiner's arguments above.

Claim 2 adds into claim 1 "a load utility" which which Dalai does not explicitly teach. However, Powers's teaching of the 3D image of object's perspective view

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teaches the camera position and its storage of the position where the images are taken as claimed (Powers, column 14, lines 24-58, column 8, lines 56-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D images correspondence with viewpoint can be used for showing the object in Dalal's system for a realistic representation of a perspective projection.

Claim 5 adds into claim 1 "said store utility allows said created graphical markup items and associated camera position to be stored in local persistent storage" which Dalal does not explicitly teach. However, Powers's teaching of the 3D image of object's perspective view teaches the camera position and its storage of the position in the client computer where as claimed (Powers, column 14, lines 24-58, column 8, lines 56-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D images correspondence with camera position can be used for showing the object in Dalal's system and its information can be stored at a local computer for a realistic representation of a perspective projection.

Claim 6 adds into claim 1 "said store utility allows said created graphical markup items and associated camera position to be stored in local persistent storage via a database management system" which Dalal does not explicitly teach. However, Powers's teaching of the 3D image of object's perspective view teaches the camera position and its storage of the position in the client computer in a network where as claimed (Powers, figure 2C, column 14, lines 24-58, column 8, lines 56-66). Thus, it

would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D images correspondence with viewpoint can be used for showing the object in Dalal's system and its information can be stored at a local computer of a network.

As per claim 7, Dalal teaches the claimed "method for maintaining persistence of graphical markup items in a collaborative graphics environment" comprising:

"associating graphical markup items created by a user" (Dalal, column 7, lines 43-54). It is noted that although Dalal mentions about a viewpoint for displaying a perspective object, Dalal does not explicitly teach "a camera position, which corresponds to a view of a model loaded into a viewing area; and is stored in persistent storage" representing the position of camera taking the image of object as claimed. However, Powers's teaching of the 3D image of object's perspective view teaches the camera position where the images are taken as claimed (Powers, a virtual camera is attached to user's representative; column 10, lines 35-65, column 8, lines 56-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D perspective images correspondence with camera position can be used for showing the object in Dalal's system for a realistic representation of a perspective projection.

Claim 8 adds into claim 7 “loading said stored graphical markup items associated with said camera position into said viewing area” which Dalal does not explicitly teach. However, Powers’s teaching of the 3D image of object’s perspective view teaches the camera position and its storage of the position where the images are taken as claimed (Powers, column 14, lines 24-58, column 8, lines 56-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal’s system as claimed because Powers’ 3D images correspondence with camera position can be used for showing the object in Dalal’s system for a realistic representation of a perspective projection.

Claim 9 adds into claim 7 “a plurality of users” viewing the loaded graphical markup items (Dalal system can be used by a number of users).

Claim 10 adds into claim 9 “said store utility allows said created graphical markup items and associated camera position to be stored in local persistent storage” which Dalal does not explicitly teach. However, Powers’s teaching of the 3D image of object’s perspective view teaches the camera position and its storage of the position where the images are taken as claimed (Powers, column 14, lines 24-58, column 8, lines 56-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal’s system as claimed because Powers’ 3D images correspondence with camera position can be used for showing the object in Dalal’s system for a realistic representation of a perspective projection.

Claims 11-12 claim a method based on the system of claims 5-6; therefore, they are rejected under the same reason.

Claims 13-18 claim a program instructions stored in a storage medium based on the method of claims 7-12; therefore, they are rejected under the same reason.

As per claim 19, Dalal teaches the claimed "system" comprising:

"a computer aided design (CAD) engine for rendering views of a three dimensional model of an object under design" (Dalal, column 7, lines 43-54); and "a collaboration module for creating a user defined annotation of said three dimensional model to be displayed" (Dalal, column 8, lines 12-42). It is noted that although Dalal mentions about a viewpoint for displaying a perspective object, Dalal does not explicitly teach the "camera position" representing the position of camera taking the image of object as claimed. However, Powers's teaching of the 3D image of object's perspective view teaches the camera position where the images are taken as claimed (Powers, a virtual camera is attached to user's representative; column 10, lines 35-65; column 14, lines 24-58). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D perspective images correspondence with a camera position can be used for showing the object in Dalal's system for a realistic representation of a perspective projection.

Claim 20 adds into claim 19 "said collaboration modules is further operable to

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cause a plurality of graphical viewer applications to simultaneously present a view of said three dimensional model according to said single predefined camera position” which Dalal does not explicitly teach. However, Powers’s teaching of the 3D image of object’s perspective view teaches the camera position and its storage of the position in a computer network consisting a plurality of viewer applications as claimed (Powers, column 14, lines 24-58, column 8, lines 48-66). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal’s system as claimed because Powers’ 3D images correspondence with camera position can be used for showing the object in Dalal’s system for a realistic representation of a perspective projection.

Claim 21 adds into claim 20 “wherein said collaboration module identifies said single predefined camera position to users of said plurality of graphical viewer applications, wherein selection of said single predefined camera position by one of said users causes presentation of said three dimensional model according to said single predefined camera position and of said user defined annotation” which Dalal does not explicitly teach. However, Powers’s teaching of the 3D image of object’s perspective view teaches the camera position and its storage of the position in a computer network consisting a plurality of viewer applications for selection of said single predefined camera position by one of said users causes presentation of said three dimensional model according to said single predefined camera position and of said user defined annotation as claimed (Powers, column 14, lines 24-58, column 8, lines 48-66). Thus, it

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would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching Powers, to configure Dalal's system as claimed because Powers' 3D images correspondence with camera position can be used for showing the object in Dalal's system for a realistic representation of a perspective projection.

Claim 22 adds into claim 19 "said collaboration module causes said user defined annotation to cease being presented when said three dimensional model is viewed from a camera position other than said single predefined camera position" which Dalal does not teach. However, Powers teaches that concept in "pop-up location" only at certain position and without display it when it is outside that position (Powers, column 12, lines 32-60). The motivation for creating a pop-up window only within a position is to reduce the unnecessary information that distracts the users.

Claim 23 adds into claim 19 "wherein said user defined annotation comprises text information" which Dalal teaches in figure 3 (e.g., documents 116).

Claim 24 adds into claim 19 "wherein said user defined annotation comprises graphical elements" which Dalal teaches in figure 3 (e.g., graphics 115).

Claims 25-31 claim a method based on the system of claims 19-24; therefore, they are rejected under the same reason.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, bipin Shalwala can be reached on (571) 272 7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu K. Nguyen
March 1, 2006


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